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Cover Page Footnote

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Motivations of One Small Business Community to Implement Environmental Sustainability as a Business Practice

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ABSTRACT: Small businesses in the Central Business District of Wilkes-Barre, Pennsylvania were surveyed to determine their familiarity with and attitudes towards environmental sustainability, including obstacles and motivators for implementation as well as current business practices. While publications on similar topics existed for small businesses in other countries, there appeared to be little recent published research for small business communities in the United States. The research used a combination of online surveys and interviews with business owners and managers to gather data, as well as an extensive literature review for the basis of the analysis. Research results from the local survey supports the notion that “peer pressure” will be the most immediate motivator for businesses in the Wilkes-Barre Downtown area to implement sustainable practices. The two primary obstacles cited by businesses, cost and the feeling of being too small, could be overcome in several ways. First of all, a grant or other financial incentive for implementation might spur businesses that would otherwise be reluctant to do so. Second, tracking the progress of all businesses as a group towards an environmental goal could demonstrate the impact of the collective business action. Addressing the “peer pressure” factor, one thought would be to highlight some early business champions of sustainability in the downtown and through some sort of public relations campaign create enthusiasm for the concept with other businesses.

I. KEYWORDS

Environmental Sustainability, Peer Pressure, Small Business, Motivators

II. INTRODUCTION

The benefits of the implementation of environmental sustainability practices for businesses of any size include improved business performance (Ferenhof *et*

al 2014), cost reductions (Cassells and Lewis 2011), increased value as an acquisition target (Moore and Manring 2008), and improved image (Hillary 2004). Thus, researchers have tried to address the question of what factors would motivate a small business to implement environmental sustainable practices. For the purposes of this project, “small business” was defined as a business having fewer

than 100 employees. Implementation by small businesses becomes particularly important when one considers their collective impact on the environment. With 28 million small businesses operating in the United States in all industry sectors, their collective environmental impact is significant (SBA 2015) In fact, various sources estimate that small businesses collectively contribute up to 70% of worldwide pollution (Johnson and Schaltegger 2016)

III. LITERATURE REVIEW

The literature unanimously concludes that while large enterprises have implemented environmental sustainability, small businesses have lagged behind in their implementation. MIT Sloan School of Management conducted a series of studies between 2011 and 2013 that interviewed executives at large, multinational firms. The findings reported that 70 percent of those firms had made environmental sustainability part of their permanent business strategy. (Haanes *et al.* 2012). These large businesses cite several drivers of their decision, including customer preferences, political pressure, resource scarcity, reaction to competitor commitment, supply chain requirements, and competition for new talent. (Haanes *et al.* 2012).

An extensive review of any existing literature on the subject of small business environmental sustainability practices was conducted to determine the relevance of the topic to small business, as well as to determine any factors that had already been identified as motivators or obstacles to small business implementation of environmentally sustainable practices. While there were quite a few studies focusing small businesses in international markets, such as the European Union, New Zealand and Australia (For example, Ferenhof *et al.* 2014) relatively few existing, published research articles or findings examining small businesses based in the United States were found. (For example Hoffman

et al. 2012; Moore and Manring 2008) Further, the existing research on small business implementation has tended to concentrate on the manufacturing sector (Ferenhof *et al.* 2014; Aykol and Leonidou, 2015). Even the research on the manufacturing sector has tended to be at the exploration stage since there has been relatively little knowledge accumulation for sustainable management practices in the SME (small medium enterprise) size sector. (Aykol and Leonidou 2015).

The literature surveyed listed several common motivators for small business implementation of environmentally sustainable practices including:

- Personal views of the owner (Masurel 2006; Federation of Small Business UK 2007;
- Environment Agency UK 2009; Jabbour and De Olivera 2011)
- Desire for positive public image (Masurel 2006; Federation of Small Business UK 2007)
- Carbon footprint reduction (Federation of Small Business UK 2007; Jabbour and De Olivera 2011)
- Improved working conditions (Masurel 2006; Environment Agency UK 2009)
- Customer and employee pressure (Federation of Small Business UK 2007; Cordano, *et al.* 2009; Neamtu 2011; Jabbour and De Olivera 2011)
- Cost savings (Masurel 2006; Federal of Small Business UK 2007; Environment Agency UK 2009, Jabbour and De Olivera 2011)
- Community pressure (Federation of Small Business UK 2007, Neamtu 2011)

Past research has cited several large obstacles to implementation, particularly by small business, including inability to locate appropriate information for resources, lack of financial resources and lack of human resources (Hillary 2004; Federation

of Small Businesses UK 2007). Other literature reviewed listed the following obstacles cited by small businesses as reasons for not implementing environmental sustainability:

- Risk of inadequate return on investment (Federation of Small Business UK 2007; Neamtu 2011)
- Lack of clear results from implementation (Federation of Small Business UK 2007, Neamtu 2011; Environment Agency UK 2009; Jabbour and De Olivera 2011)
- Lack of impact due to size of business (Federation of Small Business UK 2007; Neamtu 2011)
- Lack of Time (Federation of Small Business UK 2007)

Using the information gathered, the following methodology was developed to survey a specific group of small businesses in a defined geographic area. As noted, most of the literature sources used non U.S. businesses for information. Thus, it was sought to determine whether small businesses in a United States community would have the same motivators and list the same obstacles as those cited by the existing literature.

IV. METHODOLOGY

The research was divided into two parts: an online survey disseminated to all members of the Wilkes-Barre Downtown Business Association (approximately 100 members) and a survey that was conducted by interviewing individual businesses in the downtown district in the Summer and Fall of 2014. The online survey asked respondents general questions about attitudes towards environmental sustainability while the interviews asked separate, additional questions about specific practices and motivations. If the interview subjects had not completed an online survey, those questions were included in the interview.

For the interview list, the businesses were chosen from those listed on Hoover's database of businesses in the downtown Wilkes-Barre 18701 zip code which included a total of 361 for profit businesses that fit the size category standards. These were sorted using the North American Industry Classification System (NAICS) code and then a proportional number of businesses were randomly selected from each NAICS category to provide a representative sample of all businesses in the 18701 zip code region.

Both survey instruments included the following definition of Environmental Sustainability:

Continual assessment of the environmental impacts of the business operations and as a result, integrating processes, procedures, or practices to reduce impacts on the environment for future generations. For example, a business may target reduction of electrical energy use and install energy efficient lighting and equipment. That action would be an example of a sustainable practice. An example of a system would entail the business regularly measuring energy use and continually assessing new ways to further reduce energy use and increase operating efficiency.

The research team developed this definition based on several definitions being used in current research, including the well-known Brundtland definition (Brundtland Commission), the definition of sustainable entrepreneurship (Masurel 2006), the definition of corporate social responsibility (Federation of Small Businesses UK 2007), and the definition of Environmental Management System (Cordano *et al.* 2009)

Based on the literature review, particularly of past findings of motivators and obstacles, the survey was developed to be disseminated online as well as through personal interview questions. The online survey included ten questions that determined information

about the business responding, including the relevant industry sector, the number of employees and the age of the business. Questions were also designed to determine the general attitude of the businesses toward the concept of sustainability, perceived obstacles to implementing sustainable practices and motivations to implement sustainable practices.

The interview questions delved more deeply into the small business respondents' attitudes and practices regarding environmental sustainability. The initial questions probed the business perception about sustainability in the industry and within the respondent business itself compared to other business functional areas such as accounting, marketing and operations.

Subsequent questions asked respondents to identify specific practices that the business had implemented, together with the perceived impact of those practices on employee morale and the customer base for the business. Finally, several questions asked respondents to evaluate their likelihood of implementing environmental sustainability if competitors in the industry were to implement and if other businesses in the same downtown community were to implement sustainable practices.

V. FINDINGS AND DISCUSSION

An industry cross section of 54 businesses responded to the online survey. Most of the respondents were very small (fewer than 25 employees) and well established based on age (established for at least 10 years). As can be seen in Table 1, none of the respondents to the online survey indicated any negative attitude towards Environmental Sustainability: 77.8 percent indicated that they were positive or somewhat positive and 22.2 percent indicated neutrality on the subject. However despite this positive attitude, 57.4 percent of those responding indicated that they did not have an implementation plan and an additional 11.1 percent indicated that they were unsure of whether the business

had a plan. This dichotomy is consistent with the literature on small businesses in other geographic areas which noted an almost universal lack of enthusiasm for implementing environmental management plans despite a positive view of environmental sustainability.

How would you characterize your attitude towards the implementation of Environmental Sustainability in your business?

Very positive	38.9%
Somewhat positive	38.9%
Neutral	22.2%
Somewhat negative	0.0%
Very negative	0.0%

Does your business currently have an implementation plan for incorporating environmental sustainability into your operations?

<u>Response</u>		<u>Number of Businesses</u>
Yes	31.5%	17
No	57.4%	31
Unsure	11.1%	6

Table 1 Online Survey Attitude Questions

As noted in Table 2, the leading obstacle to implementation of a sustainability plan cited by respondents was cost (50 percent) followed by the opinion that their business was too small to make a difference (29.6 percent). In similar vein, most of these same respondents (53.7 percent) chose cost savings as their primary motivator for implementation of sustainability. In an interesting twist, non-business considerations also seem to be strong motivators for these businesses, with a combined 77.8 percent saying that they were motivated by personal views on the environment and/or reducing the carbon footprint of their business.

What do you believe is the main obstacle(s) in your decision to implement environmentally sustainable practices? (check all that apply)

Cost/risk	50.0%
Unclear results	27.8%
Business is too small to have an impact	29.6%
Lack of time	22.2%
Personal attitude	5.6%
Other	11.1%

What do you believe is the main driving force(s) in your decision to implement environmentally sustainable practices? (check all that apply)

Improved working conditions	31.5%
Positive public image	31.5%
Carbon footprint reduction	38.9%
Personal views	38.9%
Customer/employee pressure	5.6%
Community pressure	7.4%
Industry standards	20.4%
Cost savings	53.7%
Other	3.7%

Table 2 Online Survey Obstacle and Motivator Questions

The above findings seem to be consistent with existing research, which have found that financial motives tend to be a more consistent motive for implementation than personal attitudes (Cassells and Lewis 2011), although when a business decision maker (owner or manager) feels personally responsible for improving environmental conditions, they will commit the business to more environmentally sustainable practices (Williams and Schaefer 2013).

A cross section of 33 businesses participated in interviews. Like the online survey, over 90 percent of

subjects were very small with 25 or fewer employees and most of these businesses were well established with at least 10 years in business.

In contrast to the large multinational businesses (Haanes *et al.* 2012), most respondents (63.7 percent) answered that they did not feel that Environmental Sustainability was as important as other core functions of the business (Table 3). Further, a rather large number of businesses (42.4 percent) did not feel that implementation of Environmental Sustainability was important to their customers.

Compare to other core business functions (such as accounting, marketing and HR management), how would you categorize environmental sustainability in relative importance?

On the same level with other core business functions	50.0%
Not on the same level with other core business functions, but important	45.5%
Not Important	18.2%

How important is environmental sustainability and community involvement in promoting/ maintaining customers?

Extremely Important	12.1%
Very important	27.3%
Somewhat Important	18.2%
Not Important	42.4%

Table 3 Interview Responses on Perception of Importance

When given a list of common practices, nearly all respondents indicated that they had implemented some sort of environmentally sustainable practice, with recycling, energy efficiency and solid waste reduction being the most commonly implemented by businesses (Table 4). However, most businesses (78.8 percent) either were not sure or did not feel

that this implementation had improved the public perception of their business. Similarly, 72.7 percent of respondents answered the same for improvement of employee morale.

Which of the following practices have you implemented in your business?

Energy Efficiency	39.4%
Water Efficiency	21.2%
Solid Waste Reduction (including paper)	39.4%
Recycling	63.6%
Chemical Use Reduction or Substitution	15.2%
Sourcing from Local Suppliers	27.3%
Sourcing from Environmentally Sustainable Businesses	6.1%
Use of Recycled Content Materials	33.3%
Sustainable Commuting Practices	6.1%
Other	12.1%

If you have implemented environmental sustainable practices, has the public perception of your business improved since that implementation?

Yes	21.2%
No	36.4%
Not Sure	42.4%

If you have implemented environmentally sustainable practices, has it had a positive effect on the morale of your employees of your employees and has it helped you attract new employees?

Yes	27.3%
No	54.5%
Not Sure	18.2%

Table 4 Interview Responses on Practices and Impact

Thus, the findings seem to indicate that these small businesses felt that public perception and employee morale would not be affected by implementation and presumably would not motivate their businesses

to implement any future sustainable practices. However, businesses did indicate that they would implement in response to pressure from competitors' implementation and from other businesses in their immediate geographic area (the downtown district) as noted in Table 5. 57.6 percent of the respondents indicated they would be likely or very likely to implement sustainable practices if other businesses in their industry did so. 60.6 percent of the respondents indicated that they would be likely or very likely to implement if other businesses in the downtown district did so. This "peer pressure" driver is more pronounced in these small, downtown businesses than in the large multinational firms, with only 28 percent of the large firms citing pressure from competitors as a reason to implement. (Haanes *et al.* 2012).

If similar companies in your industry incorporated sustainable techniques into their business, how much more would you be likely to do the same?

Very Likely	30.3%
Likely	27.3%
Somewhat Likely	27.3%
Not Very Likely	9.1%
Not Very Likely At All	6.1%

If other businesses in the downtown business district were to incorporate sustainable practices would you be more likely to do so?

Very Likely	33.3%
Likely	27.3%
Somewhat Likely	27.3%
Not Very Likely	9.1%
Not Very Likely At All	3.0%

Table 5 Interview Responses with Reaction to Peer Implementation

VI. CONCLUSION

The research described above seems to support the notion that "peer pressure" will be the most immediate motivator for businesses in the Wilkes-

Barre downtown area to implement sustainable practices. The two primary obstacles cited by businesses, cost and the feeling of being too small, could be overcome in several ways. First of all, a grant or other financial incentive (for example tax credit) for implementation might spur businesses that would otherwise be reluctant to do so. Second, tracking the progress of all businesses as a group towards an environmental goal could demonstrate the impact of the collective business action.

Addressing the “peer pressure” factor, one thought would be to highlight some early business champions of sustainability in the downtown and through some sort of public relations campaign create enthusiasm for the concept with other businesses. Assuming that other businesses in the downtown district would follow these “champions”, eventually sufficient numbers of businesses implementing sustainable measures would create the “peer pressure” needed for widespread implementation by the small business community.

VII. REFERENCES

- [1] Aykol, B., and L. Leonidou, (2015). ‘Researching the Green Practices of Smaller Service Firms: A Theoretical, Methodological, and Empirical Assessment,’ *Journal of Small Business Management*, 53(4), 1264-1288.
- [2] Battisti, M., M. Perry, (2011). ‘Walking the Talk? Environmental Responsibility from the Perspective of Small Business Owners,’ *Corporate Social Responsibility and Environmental Management*, 18, 172-185.
- [3] GH Brundtland, and World Commission on Environment and Development (1987). *Our Common Future: Report of the World Commission on Environment and Development*. Oxford University.
- [4] Cassells, S.,K. Lewis, (2011). ‘SMEs and Environmental Responsibility: Do Actions Reflect Attitudes?,’ *Corporate Social Responsibility and Environmental Management*, 18, 186-199.
- [5] Cordano, Marshall and Silverman, (2009). ‘How do Small and Medium Businesses Go Green? A Study of Environmental Management Program in the US Wine Industry,’ *Journal of Business Ethics*, 92 (3), 463- 478.
- [6] Environment Agency (UK), 2009. *Small and Medium Sized Enterprises: Understanding and Promoting Pro- Environmental Behaviour Change*
- [7] Federation of Small Business (UK), 2007, *Social and Environmental Responsibility and the Small Business Owner*
- [8] Ferenhof, H., H. Ferenhof, L. Vignochi, , P. Selig., A. Lezana, L. Campos, (2014). ‘Environmental Management Systems in Small and Medium Sized Enterprises: An analysis and Systematic Review,’ *Journal of Cleaner Production* 74, 44-53.
- [9] Grimstad, S., and J. Burgess, (2014). ‘Environmental Sustainability and Competitive Advantage in a Wine Tourism Micro-Cluster,’ *Management Research Review*, 37 (6), 553-573.
- [10] Haanaes, K., M. Reeves, I. Von Streng Velken, M. Audretsch, D. Kiron, N. Kruschwitz, (2012). ‘Sustainability Nears a Tipping Point,’ *MIT Sloan Management Review 2012*, mitsmr.com/sust2012.
- [11] Hillary, R. (Ed.)(2000). *Small and Medium Sized Enterprises and the Environment*, Sheffield: Greenleaf.
- [12] Hillary, R., (2004). ‘Environmental Management Systems and the Smaller Enterprise,’ *Journal of Cleaner Production*, 12 , 561-569.

- [13] Hoffman, K., G. Theyel, C. Wood, (2012). 'Identifying Firm Capabilities as Drivers of Environmental Management and Sustainability Practices- Evidence from Small and Medium Sized Manufacturers,' *Business Strategy and the Environment*, 21, 530-545 .
- [14] Jabbour, C., J. De Olivera, (2012). 'Barriers to Environmental Management in Clusters of Small Businesses in Brazil and Japan: From a Lack of Knowledge to a Decline in Traditional Knowledge,' *International Journal of Sustainable Development and World Ecology*, 19(3), 247-257.
- [15] Johnson, M., Schaltegger, S. (2016) 'Two Decades of Sustainability Management Tools for SME's: How Far Have We Come?', *Journal of Small Business Management*, 54 (2), 481-505.
- [16] Masurel, E., (2006). 'Why SME's Invest in Environmental Measures: Sustainability Evidence from Small and Medium Printing Firms,' *Business Strategy and the Environment* 16, 190-201.
- [17] Moore S., S. Manring S., (2008). 'Strategy Development in Small and Medium Sized Enterprises for Sustainability and Increased Value Creation,' *Journal of Cleaner Production*, 17, 276-282.
- [18] Neamtu, B., (2011). 'Public-Private Partnerships for Stimulating the Eco-Efficiency and Environmental Responsibility of SME's,' *Transylvanian Review of Administrative Sciences* 34 E/2011, 137-154.
- [19] Small Business Administration, <http://www.sba.gov/content/small-business-trends-impact> (2015)
- [20] Williams, S., A. Schaefer, (2013). 'Small and Medium Sized Enterprises and Sustainability: Managers' Values and Engagement with Environmental and Climate Change Issues,' *Business Strategy and the Environment* 22, 173-186.